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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,714	01/02/2002	Shiback Nam	M-11590 US	8922

7590 12/23/2003
SKJERVEN MORRILL MACPHERSON LLP
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EXAMINER

GREENE, PERSHELLE L

ART UNIT PAPER NUMBER

2826

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,714

Applicant(s)

NAM ET AL.

Examiner

Pershelle Greene

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) 1-22 and 37-60 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-26 and 30-33 is/are rejected.
- 7) ☒ Claim(s) 27-29 and 34-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Application/Control Number: 10/038,714

Page 2

Art Unit: 2826

Serial Number: 10/038714

Attorney's Docket #: M-11590 US

Filing Date: 01/02/2002

Applicant: Nam et al.

Examiner: Pershelle Greene

DETAILED ACTION

Please note that applicant's arguments are not found to be persuasive. Applicant argues that a passivation film is required on a MOSFET to prevent mobile ions from entering into the device. Although a MOSFET can utilize a passivation film to prevent mobile ions from entering into the device, it is not true that all MOSFET devices utilize a passivation layer. Please refer to the abstract of U.S. Patent 6,104,060. The previous rejection stands.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 23-26 and 30-33 are being rejected under 35 U.S.C. 102(e) as being anticipated by Martinez et al. (U.S. Patent # 6,184,585).

As to claim 23, Martinez et al. discloses a co-packaged MOS-gated device and control integrated circuit having all of the claimed subject matter:

- A. "a lead frame" is met by the lead frame 40. Refer to figure 3;
- B. "a first integrated circuit chip ... of the first integrated circuit chip" is met by the first integrated circuit chip Q2 attached to a top surface of the lead frame 40 by a conductive adhesive 42, wherein the first integrated circuit chip Q2 does not have a passivation layer on a top surface of the first integrated circuit chip Q2; and
- C. "a second integrated circuit chip ... by an insulation epoxy adhesive" is met the second integrated circuit chip 16 directly attached to the top surface of the first integrated circuit chip Q2 by an insulation epoxy adhesive.

As to claim 24, Martinez et al. shows the first integrated circuit chip comprising a switching device.

As to claim 25, Martinez et al. shows the second integrated circuit chip comprising a control device.

As to claim 26, Martinez et al. shows the conductive adhesive comprising solder.

As to claim 30, Martinez et al. discloses a co-packaged MOS-gated device and control integrated circuit having all of the claimed subject matter:

- A. "a lead frame" is met by the lead frame 40; Refer to figure 3

- B. “a switching device ... on a top surface of the switching device” is met by the is met by the switching device Q2 attached to a top surface of the lead frame 40 by a conductive adhesive 42, wherein the switching device Q2 does not have a passivation layer on a top surface of the switching device Q2; and
- C. “a driving device ... by an insulation epoxy adhesive” is met the driving device 16 directly attached to the top surface of the switching device Q2 by an insulation epoxy adhesive.

As to claim 31, Martinez et al. shows a switching device comprising a transistor chip.

As to claim 32, Martinez et al. shows a driving device comprising a control integrated circuit chip.

As to claim 33, Martinez et al. shows a conductive adhesive comprising solder.

Claim Objections

3. Claims 27-29 and 34-36 are being objected to as being dependent upon a rejected base claim.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2826

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pershelle Greene whose telephone number is 703-305-3870. The examiner can normally be reached on M-F 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 703-308-6601. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

PLG
December 12, 2003



NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800